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California Regional Water Quality Control Board

Colorado River Basin Region

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WDR 01-098
Coachella

June 28, 2001

Coachella Sanitary Landfill
1995 Market Street
Riverside, CA 92501

RE: WASTE DISCHARGE REQUIREMENTS AND MONITORING AND REPORTING FOR COACHELLA SANITARY LANDFILL

Enclosed is a copy of Board Order No. 01-098. This Order was adopted by the Regional Board on June 27, 2001, at its meeting in La Quinta, California.

When submitting information required by the Monitoring and Reporting section of this Board Order, please include the following:

WDID No.	7A 33 0305 061
Board Order No.	01-098
Facility Name	Coachella Sanitary Landfill

In addition each report shall contain the following statement and signed by an authorized official of the company:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Should you have any questions, please call Susan Wilson at (760) 346-6116.

Phil Gruenberg
PHIL GRUENBERG
Executive Officer

SW/jg

File: 7A 33 0305 061, Coachella Sanitary Landfill, Board Order No. 01-098

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 01-098

WASTE DISCHARGE REQUIREMENTS
AND
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Riverside County Waste Management Department (hereinafter also referred to as the discharger), 1995 Market Street, Riverside, California 92501, submitted Closure/Post-Closure Maintenance Plans on July 17, 1997 and closure construction certification reports on February 1, 2000 for closure of the Coachella Sanitary Landfill (hereinafter referred to as the Landfill), located at 87-011 44th Avenue, Coachella, California 92202, as shown on Attachment A.

2. Definition of terms used in this Order:

   a. Waste Management Facility (WMF) – The entire parcel of property where waste discharge operations are conducted.

   b. Waste Management Unit (WMU) – An area of land, or a portion of a waste management facility, where waste is or was discharged. The term includes containment and ancillary features for precipitation and drainage control and monitoring.

   c. Landfill – A waste management unit where waste is discharged to land. It does not include surface impoundments, waste piles, or land and soil treatment.

   d. Discharger – discharger means any person who discharges waste that could affect the quality of the waters of the State, and include any person who owns a waste management unit or who is responsible for the operation of a waste management unit (Title 27, California Code of Regulations).

3. The Landfill is located on approximately 75 acres in Section 22, T5S, R8E, SBB&M, as shown on Attachment B.

4. The discharger operated the Coachella Landfill facility from 1972 to May 18, 1997. During this time, waste was disposed at the site using the cut-and-fill method of operation, and a fill-to-cover ratio of 1.5 to 1.0. The waste was deposited at the Landfill, compacted to a density of 1,200 pounds per cubic yard, and covered with six inches of compacted well graded sand and silty sand. The completed Landfill was covered with two feet of soil.

5. The landfill became subject to Waste Discharge Requirements (WDRs) under Board Order No. 72-29 in May 11, 1972. The WDRs have been updated as follows:

Date	Board Order No.
November 16, 1983	83-090
March 13, 1991	91-013

6. On September 15, 1993, the Regional Board adopted Board Order No. 93-071, which amended all landfill WDRs to incorporate Resources Conservation and Recovery Act, Subtitle D (hereinafter referred to as RCRA Subtitle D).

7. The Landfill is currently regulated by WDRs under Board Order Nos. 91-013 and 93-071. These waste discharge requirements are being updated to incorporate applicable closure requirements of combined State Water Resources Control Board/California Integrated Waste Management Board regulations, Division 2, Title 27 (hereinafter referred to as Title 27) and closure and post-closure regulations of Section 258.6, Subpart F of RCRA Subtitle D.

8. The final volume of waste in place at the time of closure is approximately five (5) million cubic yards.

9. The Landfill is located within the Salton Trough Physiographic Province, which extends from the upper Coachella Valley to the Gulf of California. The Regional structure is dominated by the San Andreas and San Jacinto Fault Zones. The San Andreas Fault is located approximately 2/3 mile to the southwest. The San Jacinto Fault is located at approximately 30 miles to the west. The Landfill is located on the Dillon Road Piedmont Slope, a narrow lowland below the little San Bernardino Mountains. This slope formed as a series of coalescing alluvial fans originating from the Little San Bernardino Mountains to the east. These materials are classified as the Ocotillo Conglomerate (old alluvium) of late Pleistocene to early Holocene Age, and younger alluvium of Holocene Age.

10. Geologic units at the Landfill appear to consist of: underlying older alluvial fan deposits, and overlying younger alluvial fan deposits. The older alluvium consists of yellowish brown to moderate brown, loose to firm, medium grained sand, with gravel and silt, traces of clay and cobbles. The gravel and sands form poorly stratified layers. Channels filled with cobbles have eroded into the underlying deposits. The older alluvial fan surfaces are moderately dissected and covered by a crudely developed surface crust, commonly known as desert pavement. Younger alluvium consists of moderate yellowish brown, loose, medium to coarse-grained sand with gravel, and traces of cobbles, silt and clay. This unit is distinguished from the underlying older alluvium by its loose nature, minor amounts of gneissic clasts, lack of abundant grains of mica, and poor stratification.

11. The most common soil type in the Landfill area is the Gilman-Coachella-Indio Association. The specific Landfill site soils consist of Carrizo stony sand (SP, SM and GP), Chuckwalla very gravelly sandy clay loam (GC,GP and GM), Carsitas cobbly sand (SP and SM) and Carsitas gravelly sand (GP, GW, SP and SW) (U.S. Department of Agriculture (USDA) Soil Survey, 1980).

12. The northern portion of the Landfill site is within an Alquist-Priolo Special Studies Zone designated by the State of California because it includes traces of suspected active faulting. Eight fault traces associated with the San Andreas Fault system are mapped within this zone and they extend into the project area, as shown on Attachment B. Recent geologic

studies indicated that active Holocene faults are present in the southern portion of the property, and that potentially active faults may exist in the vicinity of the borrow pit. The main trace of San Andreas Fault passes approximately 3,500 feet southwest of the Landfill. Published information indicates that a segment of the San Andreas Fault ruptured in 1968 approximately six (6) miles southeast of the site.

13. The design ground acceleration at the Landfill site was calculated based on a Maximum Credible Earthquake of Magnitude 8.0 occurring on the San Andreas Fault 3,500 feet from the Landfill. The resulting ground acceleration was calculated to be 1.085 g, using the equation of Crouse, et. al (1987) for unconsolidated sediments. The landfill is not within a liquefaction Hazard Zone as indicated on the Seismic Geologic Map in the Riverside County Comprehensive General Plan. Landslides are not known to exist at the site.

14. Natural surface drainage at the landfill is to the southwest. Surface water bodies in the vicinity of the site consist mostly of unnamed seasonal streams. A dry wash that runs just north of the site is rip rapped against erosion. The Coachella Canal, a man-made canal for the importation of irrigation water, is located approximately ¼ mile southwest of the site.

15. The drainage system on the Landfill will collect and transport storm water runoff from the landfill into the existing drainage courses. The landfill drainage system consists of asphalt ditches and berms to collect storm water runoff, asphalt ditches and splash pads to transport collected runoff, and concrete energy dissipators to reduce runoff velocity. These asphalt ditches discharge to energy dissipators at the toe of the faces of the landfill. The peak runoff flow on-site is approximately 44.8 cubic feet per second (cfs). All ditches discharge runoff into concrete energy dissipators, which reduce the velocity before the runoff enters the existing drainage courses.

16. Concrete rubble is reportedly buried to the depths of approximately 50 feet along the toe of the southern face of the landfill. The rubble is situated between the natural drainage course immediately south of the Landfill and the waste cells within the Landfill. This rubble may act as an erosion barrier to protect the Landfill during flooding and runoff. The Landfill footprint is shown on Attachment C.

17. A large agriculture zone bounds the Coachella Landfill Facility to the west and south and a desert zone bounds the east and north. Normal annual precipitation in this area is approximately 4.0 inches, and normal annual surface evaporation is 105 inches.

18. The landfill is unlined and has no leachate collection and removal system (LCRS). The Landfill received the following Class III nonhazardous and inert wastes:

    a. household waste
    b. demolition materials
    c. dead animals
    d. sewage sludge residue, grit and screenings
    e. septage
    f. manure
    g. plant residue
    h. grease trap waste
    i. chemical toilet waste
    j. cleansed pesticide containers

19. Tires were monofilled approximately 1,500 feet away from the working faces in the northeastern Construction/demolition debris area. After January 1, 1993, tires were temporarily stockpiled to be removed for shredding.

20. A Deed Notification submitted shows that approximately 67 acres of the total 640 acres of the land were used to dispose of refuse from 1972 to 1997; primarily in the northwest corner of the property. The area of refuse disposal includes the refuse fill area and two smaller known areas. The location of these fill areas is shown in Attachment D of this Order.

21. The Landfill is located within the Coachella Groundwater Basin, which occupies over 690 miles and extends from the San Gorgonio Pass on the west to the Salton Sea on the southeast. Due to structural and formational limits, the Coachella Groundwater Basin is divided further into four subbasins. The Landfill is located in the Desert Hot Springs Subbasin, in the northeastern portion of the Coachella Groundwater Basin (California Department of Water Resources ((CDWR), 1964). Groundwater in the Desert Hot Springs Subbasin generally occurs as an unconfined aquifer contained within alluvial fan deposits of the Ocotillo Formation and Recent-age sediments. These deposits consist of coarse-grained and poorly sorted sediment that contains occasional interbeds of fine-grained material. The recent-age alluvium extends to depths of over 100 feet, and the Ocotillo Formation has an estimated thickness of over 700 feet. Within the Landfill vicinity, the Ocotillo and Recent-age formations are bisected by the San Andreas Fault system, which likely influences the flow of groundwater in the vicinity of the site.

22. Hydrologic studies indicate that the site is separated into two major ground water flow regimes by a north/south trending fault that transects the Landfill. East of the fault, ground water is postulated to flow southwest from the Little San Bernardino Mountains turning south at the fault. West of the fault, ground water flows to the southwest. Ground water is unconfined and occurs at approximately 160 feet below ground surface at 118 above sea level (MSL) east of the fault. Abundant fault splays occur throughout the site possibly causing further aquifer compartmentalization.

23. Analyses of ground water samples collected from these wells indicate the total dissolved solid content range between 684 mg/l to 2390 mg/l.

24. On August 23, 1989 the discharger submitted a Solid Waste Assessment Test (SWAT) report. As part of the SWAT investigation, the discharger constructed two downgradient monitoring wells, MW-1 and MW-3, and one upgradient well (MW-2). Ground water analyses from these monitoring wells indicated the following constituents of concern exceeded background concentrations:

Constituents of Concern	Maximum Concentration (μg/l)[1]	California Primary Maximum Contaminant Level(μg/l)
1,1-dichloroethane	5	5
1,4-dichlorobenzene	7	5
tetrachloroethene	45	5
trichlorethene	10	5
trans-1,2-dichloethene	1	10
chloroform	3	100
dichlorodifluoromethane	34	-
trichlorofluoromethane	1	150
toluene	5	-
methylene chloride	4	5

[1] μg/l = micrograms per liter

25. The Regional Board Executive Officer issued Cleanup and Abatement Order (CAO) No. 90-74 on September 21, 1990 and CAO No. 95-097 in September 1995, which required additional field investigation of the site and surrounding area to define the extent of ground water contamination.

26. Groundwater samples collected during April 1, 2000 through September 30, 2000 monitoring period indicate the presence and concentration of the following constituents:

Parameter	Result µg/l	Well No.
Tetrachloroethene (MCL = 5.0 µg/l)	12 µg/l	MW-1
Tetrachloroethene (MCL = 5.0 µg/l)	24 µg/l	MW-3
Tetrachloroethene (MCL = 5.0 µg/l)	34 µg/l	MW-4
Tetrachloroethene (MCL = 5.0 µg/l)	64 µg/l	MW-6
Trichloroethene (MCL = 5.0 µg/l)	11 µg/l	MW-6
Tetrachloroethene (MCL = 5.0 µg/l)	4.2 µg/l	MW-5
Tetrachloroethene (MCL = 5.0 µg/l)	1.8 µg/l	MW-7
1,2-Dichloroethane (MCL = 0.5 µg/l)	0.7 µg/l	MW-6
Cis-1,2-Dichloroethene (MCL = 6.0 µg/l)	6.3 µg/l	MW-6

27. In addition to the groundwater monitoring wells associated with the Landfill, five groundwater supply wells have been identified within one mile of the property as follows:

    a. A well on the property was used to supply water for dust control purposes at the Landfill.

    b. A well approximately 2/3 miles west of the southwestern corner of the Landfill property boundary, and approximately ¾ miles southwest of the Landfill, is reportedly used for domestic purposes.

    c. One inactive agriculture well approximately ½ miles west of the Landfill, has reportedly not been used for about 15 years.

    d. Two irrigation wells are reported at unknown locations approximately ¾ to 1-3/4 miles south of the southern boundary of the property (Riverside County of Health, 1992). It is not known if these wells are active.

28. The discharger installed and operates an active landfill gas collection and flare system. The system consists of 31 vertical wells that intercept gas generated by the waste and force it through a flare at low pressure, where it is ignited, as shown in Attachment E. The construction of a gas collection and flare system was completed on August 23, 1999.

29. The discharger installed six multi-level gas probes around the perimeter of the site in fall 1999, as shown on Attachment F.

30. The discharger has installed a soil moisture monitoring system and a weather station in accordance with the Final Closure/Post Closure Maintenance Plan. The installation of the final cover moisture sensors began on November 1, 1999 and was completed on November 5, 1999. Installation of the moisture sensor data recording computers and weather station began on November 30, and was completed on December 6, 1999. The system is capable of measuring soil moisture at 6" intervals between the depths of 6" through 72" below the

ground surface, and recording the measurements each hour as specified in the Construction Quality Assurance Plan.

31. A transfer/recycling station is located between the north landfill property boundary and the northeast corner of the landfill footprint. The total leased area is approximately 14.47 acres. The station is an enclosed structure including a 120-foot x 120-foot tipping floor and transfer loadout area. The facility also has a Household Hazardous Waste (HHW) storage box and an aboveground waste oil storage tank.

32. The Coachella Landfill Compost Facility is on the southern portion of the Landfill boundary, occupying approximately 35.27 acres. The compost facility is regulated under separate Waste Discharge Requirements, Board Order No. 00-045.

33. The compost management unit is lined with a 40-mil High Density Polyethylene (HDPE) Liner System and has monitoring devices at several locations underneath the liner to monitor potential release beneath the liner.

34. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993, and designates the beneficial uses of ground and surface waters in this Region.

35. The Landfill is located in the Coachella Hydrologic Subunit

36. The beneficial uses of ground water in the Coachella Hydrologic Subunit are:

    a. Municipal Supply (MUN)
    b. Industrial Supply (IND)
    c. Agricultural Supply (AGR)

37. Federal regulations for storm water discharges were promulgated by the U. S. Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require that specific categories of facilities which discharge storm water associated with industrial activity, obtain a NPDES Permit and implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.

38. The State Water Resources Control Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.

I. CLOSURE

39. The California Integrated Waste Management Board approved the Landfill Final Closure Plan in a letter dated April 28, 1997. And the Local Solid Waste Enforcement Agency for Riverside County, Department of Environmental Health (LEA) reviewed and approved alternative monolithic final cover of the Landfill on March 16, 1998.

40. Construction of the Landfill final cover began on September 8, 1998 and was completed on August 23, 1999. The final cover consisted of individual layers of compacted soil materials including from bottom to top: a minimum one (1) foot thick foundation layer composed of existing cover or non-selected fill materials, and a minimum four (4) foot thick soil layer composed of selected on-site granular (screened and moisture conditioned) borrow soils.

41. Final cover on the top of the Landfill is designed with a minimum of five- percent slope. Side slopes of the completed cover are designed with a minimum of three (3) horizontal to one (1) vertical.

42. The Landfill settlement will be monitored by the survey monuments installed on-site. The Landfill settlement is expected to be 17 feet for a maximum waste height of 160 feet in the southern portion of the Landfill. Differential settlement is expected to be up to one (1) foot per 50 horizontal feet. Differential settlement may result in local depression of the ground surface, which could cause ponding of surface runoff. Topographic maps will be generated from the aerial surveys at a scale of one (1) inch to 100 feet with a maximum contour interval of two (2) feet. From the topographic maps, iso-settlement maps will be produced showing changes in elevation from the base topographic map.

43. Any precipitation falling on the Landfill will be directed toward diversion berms along the top deck perimeter due to the five- percent grading.

44. Seven groundwater-monitoring wells are currently installed around the Landfill and are monitored on a quarterly basis. The Groundwater Monitoring Program will continue after closure of the Landfill, possibly incorporating the installation of additional groundwater monitoring wells.

45. The discharger will continue gas monitoring after closure of the Landfill. At the end of the Post-Closure Maintenance Period and with the approval of the Local Enforcement Agency, the SCAQMD and Regional Water Quality Control Board, the gas collection system, flare, and monitoring equipment will be abandoned. Instantaneous surface monitoring and gas migration sampling will be performed as required by the SCAQMD.

46. Post-Closure Maintenance

    a. The discharger will inspect the Landfill quarterly. The inspection will include the following areas: Final grade, final cover, cover vegetation, drainage control system, Landfill gas monitoring system, Landfill gas collection system, ground water monitoring system, nuisance control measures for litter, vector, fire control. The discharger will also inspect the security measures, signs, access restrictions, and all locks for monitoring and control systems.

    b. The discharger will inspect the Landfill quarterly for erosion and settlement throughout the post-closure maintenance period. Any erosion and settlement of the cover system will be appropriately mitigated in a manner acceptable to the Regional Board's Executive officer.

CEQA

47. Riverside County, as lead agency, certified a Mitigated Negative Declaration and a De Minimis Impact Finding registered with the State Clearing House Number 96081034 and the Environmental Assessment (EA) No. 37033 on January 8, 1997, for the Landfill Closure/Post-Closure and the Coachella Transfer/Recycling facility. The following water quality or related water quality impacts were identified during the environmental assessment for the Mitigated Negative Declaration are given below, followed by mitigation measures addressed in this Board Order are listed below:

SEISMIC/SOIL

a. Potential Impact – The project may result in or expose people to potential impacts involving seismic fault rupture. The project may result in or expose people to potentials involving groundshaking and liquefaction.

Mitigation – Specifications No. 15, 20, 21 and 22

b. Potential Impact – The project may result in or expose people to potential impacts involving erosion, changes in topography or unstable soil condition from excavation, grading or fill.

Mitigation – Specifications No. 4, 7 and 8, and Provision 21

c. Potential Impact – The project may result in or expose people to potential impacts involving ground subsidence and/or surface displacement due to landfill settlement.

Mitigation – Specifications No. 4, 7, 8, 15 and 18

WATER

a. Potential Impact – The project may result in changes in absorption rates, drainage patterns, or the rate and amount of surface run-off.

Mitigation – Specification No. 19, and Provisions No. 4, 9 and 21

b. Potential Impact – The project may result in impacts to groundwater quality.

Mitigation – Specifications No. 4 and 7, Prohibitions No. 4 and 6, and Provision No. 28

PUBLIC HEALTH AND SAFETY

a. Potential Impact – The project may involve a risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation).

Mitigation – Specifications No. 5, 16 and 23, Prohibitions No. 2 and 3, Provision No. 9

b. Potential Impact – The project may involve increased fire hazard in areas with flammable brush, grass, or trees?

Mitigation – Specification No. 22, Prohibition No. 3

48. The discharger will provide the estimated cost for closure and post-closure maintenance of the Landfill. The estimated costs are $4,800,000 for closure as presented in the closure plan and $4,200,000 for the post-closure maintenance. The inflation factor to calculate the annual increase in the post-closure maintenance cost estimate may be derived from the Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce.

49. The Board has notified the discharger and all known interested agencies and persons of its intent to issue waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

50. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. 91-013 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

A. Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050 of Division 7 of the California Water Code.

2. Waste material shall be confined to the waste management facility as defined in Findings No. 2 and 3 and described in the attached site maps.

3. The discharger shall take measures acceptable to Regional Board's Executive Officer to mitigate side slope erosion of the final cover at the Landfill.

4. Any precipitation falling on the perimeter of the Landfill shall be directed away from the Landfill.

5. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources, shall not contact or percolate through the waste discharged at the site.

6. The exterior surfaces of the disposal area, including the intermediate and final Landfill covers, shall be graded and maintained to promote lateral runoff of precipitation and to prevent ponding.

7. Waste material shall not be discharged on any ground surface, which is less than five feet above the highest anticipated ground water level.

8. The discharge shall not cause degradation of any water supply.

9. The discharger shall use the constituents listed in Monitoring and Reporting Program No. 01-098 and revisions thereto, as "Monitoring Parameters". These monitoring parameters are subject to the most appropriate statistical or non-statistical test under Monitoring and Reporting Program No. 01-098, Part III, and any revisions revised Monitoring and Reporting Program approved by the Regional Board's Executive Officer.

10. The discharger shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to detection monitoring of the attached Monitoring and Reporting Program No. 01-098 and revision thereto.

11. The discharger shall implement the attached Monitoring and Reporting Program No. 01-098 and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the WMU, or any impairment of beneficial uses associated with (caused by) discharges of waste to the WMU.

12. The discharger shall follow the Water Quality Protection Standard (WQPS) for detection monitoring established by the Regional Board pursuant to Title 27, Section 20390. The following are four parts of WQPS as established by the Regional Board (the term of art used in this Board Order regarding monitoring are defined in Part I of the attached Monitoring and Reporting Program No. 01-098, and revisions thereto, which is hereby incorporated by reference.

    a. The discharger shall test for the monitoring parameters and the Constituents of Concern (COC) in the Monitoring and Reporting Program No. 01-098 and revisions thereto.

    b. Concentration Limits - The concentration limit for each monitoring parameter and constituents of concern for each monitoring point, shall be its background value as obtained during that reporting period.

    c. Monitoring points and background monitoring points for detection monitoring shall be those listed in the attached Monitoring and Reporting Program No. 01-098 Part II.A.4., and revisions thereto. The points of compliance are listed in Monitoring and Reporting Program No. 01-098 (Part II.A.4), and any revision thereto, and extend through the zone of saturation.

    d. Compliance period - The estimated duration of the compliance period for this WMF is 5 years. Each time the Standard is not met (i.e. releases discovered), the WMF begins a compliance period on the date the Regional Board directs the discharger to begin an Evaluation Monitoring Program. If the discharger's Corrective Action Program (CAP) has not achieved compliance with the standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the WMF has been in continuous compliance for at least three consecutive years.

13. The discharger shall install three settlement monuments on the Landfill and two survey monuments on the ground for monitoring refuse settlement at the Landfill. Also, the entire permitted site shall be aerially photographed at the end of the closure activities and every five years throughout the post closure maintenance period.

14. The discharger shall remove and relocate any unacceptable wastes that were brought or discharged at this WMU in violation of these requirements.

15. Water used for the process and site maintenance shall be limited to the amount necessary in the process and for dust control.

16. Drainage features within the Landfill footprint shall be designed to accommodate the 100-year, 24-hour storm event.

17. The Landfill shall be protected from any washout or erosion, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.

18. The discharger shall closely examine the Landfill final cover, vegetative cover, slope conditions, drainage control system, and surface grading for signs of cracking or depressed/settled areas, following a major earthquake. If cracking or depressed areas of the cover is identified, the discharger shall repair the cover, depressed area, or damaged area within 30 days from the earthquake date.

19. The discharger shall examine the integrity of the groundwater monitoring wells and collect and analyze groundwater samples for all the constituents listed in the quarterly monitoring requirement of Monitoring and Reporting Program No. 01-098, and revisions thereto, within 30 days after a major earthquake.

20. The discharger shall examine the landfill gas collection and disposal system for damage following an earthquake event at the site.

21. The discharger shall not cause the release of pollutants, or waste constituents in a manner, which could cause a condition of contamination, or pollution to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method listed in the attached Monitoring and Reporting Program No. 01-098 and revisions thereto.

B. Prohibitions

1. The discharge or deposit of liquid, semi-solid (i.e., waste containing less than 50% solids) and solid waste (as defined in Title 27) at this site is prohibited.

2. The discharge or deposit of hazardous, designated waste (as defined in Title 27), and other wastes determined by the Regional Board to pose a potential threat to water quality at this site is prohibited.

3. The co-disposal of incompatible waste is prohibited.

4. The discharger shall not cause degradation of any groundwater aquifer and water supply.

5. The discharge of waste to land not owned or controlled by the discharger is prohibited.

6. The discharge shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.

7. Direct discharge of any waste to any surface water or surface drainage courses is prohibited.

C. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 01-098 and future revisions thereto, as specified by the Regional Board's Executive Officer.

2. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.

3. Prior to any modifications in this facility, which would result in material change in the quality or quantity of discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.

4. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California Registered Civil Engineer or Certified Engineering Geologist, and shall be certified by the individual as meeting the prescriptive standards and performance goals of Title 27.

5. The discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.

7. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;

   b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and

   d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.

8. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.

9. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

10. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in according with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

11. The discharger shall comply with the following:

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board's Executive Officer at any time.

c. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements.
2. The name of individual(s) who performed the sampling or measurements.
3. The date(s) analyses were performed.
4. The name of individual(s) who performed the analyses.
5. The results of such analyses.

d. Monitoring must be conducted according to test procedures described in the Monitoring and Reporting Program No 01-098, unless other test procedures have been specified in this Board Order.

12. The discharger shall maintain legible records on the volume and type of each waste discharged at the site. These records shall be available for review by representatives of the Regional Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.

13. The discharger shall maintain visible monuments identifying the boundary limits of the entire waste management facility.

14. The discharger shall submit to this Regional Board and to the California Integrated Waste Management Board, evidence of Financial Assurance for the Post Closure, pursuant to (Section 22207 and 22212 of Title 27). The post-closure period shall be at least 30 years. However, the post-closure maintenance period shall extend as long as the waste poses a threat to water quality.

15. Within 180 days of the adoption of this Board Order, the discharger shall submit to the Regional Board in accordance with (Section 20380(b) of Title 27), assurance of financial responsibility acceptable to the Regional Board's Executive Officer for initiating and completing corrective action for all known or reasonable foreseeable release from the Landfill.

16. This Board Order is subject to Regional Board review and updating, as necessary to comply with changing State or Federal laws, regulations, policies, or changes in the discharger characteristics.

17. All monitoring systems shall be readily accessible for sampling and inspection.

18. The procedure for preparing samples for the analyses shall be consistent with the Monitoring and Reporting Program No. 01-098 and any revisions thereto. The Monitoring Reports shall be certified to be true and correct, and signed, under penalty of perjury, by an agent of the discharger.

19. The discharger is the responsible party for the waste discharge requirements, and the monitoring and reporting program for the facility. The discharger shall comply with all conditions of these waste discharge requirements. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act. Violations may result in enforcement actions, including Regional Board Orders or court orders, requiring corrective action or imposing civil monetary liability or in modification or revocation of these waste discharge requirements by the Regional Board.

20. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.

21. The discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in site conditions that could impair the integrity of waste containment facilities or of precipitation and drainage control structures.

22. After a significant earthquake event, the discharger shall:

    a. Notify the Regional Board by telephone within 48 hours; and

    b. Within 7 days submit to the Regional Board a detailed post-earthquake report describing any physical damages to the containment feature, ground water monitoring, and a corrective action plan to be implemented at the landfill.

23. The discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.

24. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.

25. The discharger shall submit a Notice of Intent (NOI) to the State Water Resources Control Board to be covered under the Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities.

I, Philip A. Gruenberg, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 27, 2001.

Executive Officer

June 27, 2001
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 01-098
FOR

RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County

CONSISTS OF

PART I, PART II AND PART III

PART I

A. GENERAL

1. Responsibilities of waste dischargers are specified in Section 13225(a), 13267(b), and 13387(b) of the California Water Code, and the State Water Resources Control Board's Resolution No. 93-062. This self-monitoring program is issued in accordance with Provision No. 1 of Regional Board Order No. 01-98. The principal purpose of this self-monitoring program is:

   a. To document compliance with the Waste Discharge Requirements established by the Regional Board.

   b. To facilitate a self-policing by the discharger in the prevention and abatement of pollution arising from the discharge.

   c. To prepare water quality analyses.

   d. To prepare vadose zone (unsaturated zone) gas, if applicable, and liquid quality analyses.

B. DEFINITION OF TERMS

1. The "Monitored Media" are those water and/or gas-bearing media that are monitored pursuant to this Monitoring and Reporting Program. The Monitored Media may include (1) ground water in the uppermost aquifer, in any other portion of the zone of saturation (Title 27, Section 20164) in which it would be reasonable to anticipate that waste constituents migrating from the Unit could be detected, and in any perched zones underlying the unit, (2) any bodies of surface water that could be measurably affected by a release, (3) soil-pore liquid beneath and/or adjacent to the Unit, and (4) soil-pore gas beneath and/or adjacent to the Unit.

2. The "Constituents of Concern (COC)" are those constituents which are likely to be present in the waste disposed in the Waste Unit or which are likely to be derived from waste constituents, in the event of a release.

3. The "Monitoring Parameters" consists of a list of constituents and parameters used for the majority of monitoring activity.

4. The "Volatile Organics Composite Monitoring Parameter for Water (VOC_{water})" and the "Volatile Organics Composite Monitoring Parameter for Soil-Pore Gas (VOC_{spg}) are composite Monitoring Paramaters addressing all volatile organic constituents detectable in a sample of water or soil-pore gas, respectively

5. "Standard Observations" refers to:

   a. For Receiving Waters

      1. Floating and suspended materials of waste origin: presence or absence, source, and size of affected area;

2. Discoloration and turbidity: description of color, source, and size of affected area;

3. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;

4. Evidence of beneficial use: presence of water – associated wildlife;

5. Flow rate; and

6. Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Along the perimeter of the Landfill:

1. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and flow rate (show affected area on map);

2. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and

3. Evidence of erosion and/or of exposed refuse.

c. For the Landfill:

1. Evidence of ponded water at any point on the waste management facility (show affected area on map);

2. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;

3. Evidence of erosion and/or of daylight refuse; and

4. "Standard Analysis and Measurements", which refers to:

a. Turbidity (only for water samples in NTU;

b. Water elevation to the nearest 1/100th foot above mean sea level (only for ground water monitoring); and

c. Sampling and statistical analysis of the Monitoring Parameters.

6. "Matrix Effect" refers to any increase in the Method Detection Limit or Practical Quantitation Limit for a given constituent as a result of the presence of other constituents – either of natural origin or introduced through a release – that are present in the sample of water or soil-pore gas being analyzed.

7. "Facility-Specific Method Detection Limit (MDL)", for a given analytical laboratory using a given analytical method to detect a given constituent (in spite of any Matrix Effect) means the lowest concentration at which the laboratory can regularly differentiate – with 99% reliability – between a sample which contains the constituent and one which does not.

8. "Facility-Specific Practical Quantitation Limit (PQL)", for a given analytical laboratory using a given analytical method to determine the concentration of a given constituent (in spite of any Matrix Effect) means the lowest constituent concentration the laboratory can regularly quantify within specified limits of precision that are acceptable to the Regional Board's Executive Officer.

9. "Reporting Period" means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal. Therefore, the reporting periods for monitoring parameters are semi-annually, annually, and every five years. The Five-Year COC analysis Report shall include a discussion and summary of all monitoring parameters required during the Monitoring Period. The submittal dates to the Regional Board office for each reporting period shall be as follows:

   a. Semi-Annual Monitoring Reports

      1. First semi-annual (January 1 through June 30) – report due by July 31

      2. Second semi-annual (July 1 through December 31) – report due by February 15

   b. Annual Summary Report

      1. January 1 through December 31 – report due on February 15 of the following year.

   c. Five-Year COC Analysis Report

      Commencing upon adoption of this Order and continuing throughout the Post-Closure period, January of the first year through December of the fifth year and every five years thereafter – report due on February 15 of the sixth year.

C. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA methods, and in accordance with an approved sampling and analysis plan. Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board's Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. In addition, the discharger is responsible for seeing that the laboratory analysis of all samples from Monitoring Points and Background Monitoring Points meets the following restrictions:

a. The methods and analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentration which produce more than 90% non-numerical determinations (i.e. "trace" or "ND") in data from Background Monitoring Points for that medium, the analytical methods having the lowest "facility-specific method detection limit

(MDL)"(defined in Part I.B.7) shall be selected from the methods which would provide valid results in light of any "Matrix Effects" (defined in Part I.B.6) involved.

b. "Trace" results, results falling between the MDL and the facility-specific Practical Quantitation Limit (PQL), shall be reported as such, and shall be accompanied both by the estimated MDL and PQL for that analytical run and by an estimate of the constituent concentration.

c. MDL and PQL shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDL and PQL shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.

d. All QA/QC data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of any recovery rate that is less than 80%, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery.

e. Upon receiving written approval from the Regional Board's Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.

f. Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.

g. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.

h. The MDL shall always be calculated such that it represents a concentration associated with a 99% reliability of a non-zero result.

D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

1. Identity of sample and of the Monitoring Point from which it was taken, along with the identity of the individual who obtained the sample;

2. Date and time of sampling;

3. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;

5. Calculations of results; and

6. Results of analyses, and the MDL and PQL for each analysis.

E. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. A written "Detection Monitoring Report" shall be submitted semi-annually (Part II.A.2.), in addition to an "Annual Summary Report". Every five years the discharger shall submit a report concerning the direct analysis of all Constituents of Concern as indicated in Part II.A.3. ("COC Report"). All reports shall be submitted according to stipulated date of their respective reporting period as shown in the Summary of Monitoring and Reporting Program No. 01-098 The reports shall be comprised of at least the following:

   a. Letter of Transmittal: A letter transmitting the essential points in each report shall accompany each report. Such a letter shall include a discussion of any requirement violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the discharger has previously submitted a detailed time schedule for correcting said requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice-president or above, or by his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

   b. Each Detection Monitoring Report and each COC Report shall include a compliance evaluation summary. The summary shall contain at least:

      1. For each monitored ground water body, a description and graphical presentation of the velocity and direction of the ground water flow under/around the Unit, based upon water level elevation taken during the collection of the water quality data submitted in the report;

      2. Pre-sampling Purge for Samples Obtained From Wells: For each monitoring well addressed by the report, a description of the method and time of water level measurement, of the type of pump used for purging and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of the field equipment, results of the pH,

temperature, conductivity, and turbidity testing, the well recovery time, and the method of disposing of the purge water);

3. Sampling: For each monitoring point and background Monitoring Point addressed by the report, a description of the type of pump – or other device – used and its placement for sampling, and a detailed description of the sampling procedure (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and times of sampling, the names and qualifications of the person actually taking the samples, and any other observations);

4. Quarterly Determination of Ground Water Flow Rate/Direction (Title 27): The discharger shall measure the water level in each well and determine ground water flow rate and direction in each ground water body quarterly, including the times of the expected highest and lowest elevations of the water level for the respective ground water body. This information shall be included in the semi-annual monitoring reports;

c. A map or aerial photograph showing the locations of observation stations, Monitoring Points, and Background Monitoring Points;

d. For each Detection Monitoring Report and each COC Report, include laboratory statements of results of all analyses demonstrating compliance with Part I.B.;

e. An evaluation of the effectiveness of the leachate monitoring and control facilities, and the run-off/run-on control facilities; and

f. A summary and certification of completion of all Standard Observations (Part I.B.6) for the Unit, and for Receiving Waters.

g. Gas Monitoring: The discharger shall monitor the active Landfill gas as specified in the Summary of Monitoring and Reporting Program No. 01-098.

2. CONTINGENCY REPORTING

a. The discharger shall report by telephone concerning any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Regional Board within seven days, containing at least the following information:

1. A map showing the location(s) of seepage;

2. An estimate of the flow rate;

3. A description of the nature of the discharge (e.g., all pertinent observations and analyses); and

4. Corrective measures underway or proposed.

b. Should the initial statistical comparison (Part III.A.1.) or non-statistical comparison (Part III.A.2.) indicate, for any Constituent or Concern of Monitoring Parameter, that a release is tentatively identified, the discharger shall immediately notify the Regional Board verbally as to the Monitoring Point(s) and constituent(s) or parameter involved, shall provide written notification by certified mail within seven days of such

determination (Title 27, Section 20420(j)(1)), and shall carry out a discrete retest in accordance Part III.A.3. If the retest confirms the existence of a release, the discharger shall carry out the requirements of Part I.E.2.d. In any case, the discharger shall inform the Regional Board of the outcome of the retest as soon as the results are available, following up with written results submitted by certified mail within seven days of completing the retest.

c. If either the discharger or the Regional Board determines that there is a significant physical evidence of a release (Title 27, Section 20385(3)), the discharger shall immediately notify the Regional Board of this fact by certified mail (or acknowledge the Regional Board's determination) and shall carry out the requirements of Part I.E.2.d. for all potentially-affected monitored media.

d. If either the discharger concludes that a release has been discovered:

   1. If this conclusion is <u>not</u> based upon "direct monitoring" of the Constituents of Concern, pursuant to Part II.A.3., then the discharger shall, within thirty days, sample for all Constituent of Concern at all Monitoring Points and submit them for laboratory analysis. Within seven days of receiving the laboratory analytical results, the discharger shall notify the Regional Board, by certified mail, of the concentration of all Constituents of Concern at each Monitoring Point. Because this scan is not to be tested against background, only a single datum is required for each Constituent of Concern at each Monitoring Point (Title 27, 20420(k)(1)).

   2. The discharger shall, within 90 days of discovering the release, submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring Program meeting the requirements of Title 27, Sections 20420(k)(5) and 20425; and

   3. The discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of Title 27, Section 20420(k)(6).

e. Any time the discharger concludes – or the Regional Board Executive Officer directs the discharger to conclude – that a liquid – or gaseous-phase release from the Unit has proceeded beyond the facility boundary, the discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the contaminant plumes (Affected Persons).

   1. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the discharger's current knowledge of the nature and extent of the release; and

   2. Subsequent to initial notification, the discharger shall provide updates to all Affected Persons – including any newly Affected Persons – within 14 days of concluding there has been any material change in the nature or extent of the release.

3. ANNUAL SUMMARY REPORT

The discharger shall submit an annual report to the Regional Board on February 15 each year that covering the previous annual reporting period of January 1 through December 31 as shown in the Summary of the Monitoring and Reporting Program No. 01-098. This report shall contain:

a. A Graphical Presentation of Analytical Data (Title 27, Section 20415(e)(14)): For each Monitoring Point and Background Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given Monitoring Point and Background Monitoring Point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted data, the Regional Board's Executive Officer may direct the discharger to carry out a preliminary investigation (Title 27, Section 20080(d)(2)0, the results of which will determine whether or not a release is indicated;

b. All monitoring analytical data obtained during the previous two six-month Reporting Periods, presented in tabular form as well as on 3 1/2" diskettes, either in MS-DOS/ASCII format or in another file format acceptable to the Regional Board's Executive Officer. Data sets too large to fit on a single diskette may be submitted on disk in a commonly available compressed format (e.g., PK-ZIP or NORTON BACKUP). The Regional Board regards the submittal of data in hard copy and on diskette as "...the form necessary for..." statistical analysis (Title 27, Section 20420(h)), that facilitates periodic review by the Regional Board's statistical consultant;

c. A comprehensive discussion of the compliance record, and the result of any corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

d. A written summary of the ground water and soil-pore gas analyses, indicating any changes made since the previous annual report; and

e. An evaluation of the effectiveness of the leachate monitoring/control facilities, pursuant to Title 27, Section 20340.

PART II: MONITORING AND OBSERVATIONS SCHEDULE

A. WATER AND SOIL-PORE GAS SAMPLING/ANALYSIS FOR DETECTION MONITORING

Monitoring parameters report due semi-annually, Constituents of Concern report due every five years (details below).

1. Thirty-Day Sample Procurement Limitation: For any given monitored medium, the samples taken from all Monitoring Points and Background Monitoring Points to satisfy the analysis requirements for a given reporting period shall all be taken within a span not exceeding 30 days, and shall be taken in a manner that ensures sample independence to the greatest extent feasible (Title 27, Section 20415(e)(12)(B)). Ground water sampling shall also include an accurate determination of the ground water surface elevation and field parameters (temperature, electrical conductivity, turbidity) for that Monitoring Point or Background Monitoring Point (Title 27, Section 20415(e)(13)); ground water elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the Quarterly ground water flow rate/direction analyses required under Part II.A.6. Statistical or non-statistical analysis shall be carried out as soon as the data is available, in accordance with Part III of this program.

2. "Indirect Monitoring" for Monitoring Parameters done quarterly: For each monitored medium, all Monitoring Points assigned to Detection Monitoring (Part II.A.4. below) and all Background Monitoring Points shall be sampled quarterly. Quarterly monitoring periods are as follows: First quarter; January 1 through March 31; second quarter, April 1 through June 30; third quarter, July 1 through September 30; and fourth quarter, October 1 through December 31. Monitoring for Monitoring Parameters shall be carried out in accordance with Part II.A.1. and III of this program.

3. "Direct Monitoring" of Constituents of Concern Every Five Years: In the absence of a release being indicated (1) pursuant to Parts II.A.2 and III.A.3. for a Monitoring Parameter, (2) based upon physical evidence, pursuant to Part I.E.2.c., or (3) by a study required by the Regional Board's Executive Officer based upon anomalies noted during visual inspection of graphically-depicted analytical data (Part I.E.3.a.), then the discharger shall sample all Monitoring Points and Background Monitoring Points of water-bearing media, not including soil-pore gas, for all Constituents of Concern every fifth year, beginning with the year of adoption of this Board Order, with successive direct monitoring efforts being carried out alternately in the first semi-annual monitoring period of one 5-year sampling event (Monitoring Period ends June 30) and the second semi-annual monitoring period (Monitoring Period ends December 31)of the next 5-year sampling event, and every fifth year, thereafter. Direct monitoring for Constituents of Concern shall be carried out in accordance with Parts II.A.1. and III of this program, and shall encompass only those Constituents of Concern that do not also serve as a Monitoring Parameter.

4. "Monitoring Points and Background Monitoring Points for Each Monitored Medium: The discharger shall sample the following Monitoring Points and Background Monitoring Points in accordance with the sampling schedule given under Parts II.A.2 and II.A.3 (immediately foregoing), taking enough samples to qualify for the most appropriate test under Part III.

   a. The Monitoring Points shall be Point of Compliance wells MW-1, MW-3, MW-4, MW-5, and MW-6.

b. The Background Monitoring Points shall be wells MW-2 and MW-7.

5. Initial Background Determination: For the purpose of establishing an initial pool of background data for each Constituent of Concern at each Background Monitoring Point in each monitored medium (Title 27, Section 20415(e)(6):

   a. Whenever a new Constituent of Concern is added to the Water Quality Protection Standards, including any added by the adoption of this Board Order, the discharger shall collect at least one sample quarterly for at least one year from each Background Monitoring Point in each monitored medium and analyze for the newly-added constituent(s); and

   b. Whenever a new Background Monitoring Point is added, including any added by this Board Order, the discharger shall sample it at least quarterly for at least one year, analyzing for all Constituents of Concern and Monitoring Parameters.

6. Quarterly Determination of Ground Water Flow Rate/Direction (Title 27, Section 20415(e)(15)): The discharger shall measure the water level in each well and determine ground water flow rate and direction in each ground water body described in Part II.A.4. at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective ground water body. This information shall be included in the semi-annual monitoring reports required in Part II.A.2.

PART III: STATISTICAL AND NON-STATISTICAL ANALYSES OF SAMPLE DATA DURING A DETECTION MONITORING PROGRAM

A. The discharger shall propose appropriate data analysis method(s) for the approval of the Regional Board's Executive Officer, for comparing downgradient concentrations for each monitored constituent or parameter with its respective background concentration to determine if there has been a release from the WMF. Unless or until the discharger proposes an alternative data analysis method(s) acceptable t the Regional Board's Executive Officer, the discharger shall proceed sequentially down the list of statistical analysis methods in Part III.A.1., followed by the non-statistical method in Part III.A.2., using the first method for which the data qualifies. If an analysis tentatively indicates the detection of a release, the discharger shall implement the retest procedure under Part III.A.3.

1. Statistical Methods: The discharger shall use one of the following statistical methods to analyze Constituents of Concern or Monitoring Parameters which exhibit concentrations exceeding their respective MDL in at least ten percent of the background samples taken during that Reporting Period. Each of these statistical methods is more fully described in the Statistical Methods Discussion that is attached to this Program and is hereby incorporated by reference. Except for pH, which uses a two-tailed approach, the statistical analysis for all constituent and parameters shall be one-tailed (testing only for statistically significant increase relative to background):

   a. One-way Parametric Analysis of Variance ANOVA followed by multiple comparisons (Title 27, Section 25415(e)(8)(A)). This method requires at least four independent samples from each Monitoring Point and Background Monitoring Point during each sampling episode. It shall be used when the background data from the parameter of constituent obtained during a given sampling period, has not more than 15% of the data below PQL. Prior to analysis, replace all 'trace' determinations with a value halfway between the PQL and MDL values reported for that sample run, and replace all "non-detect" determinations with a value equal to half the MDL value reported for that sample run. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated from that parameter or constituent;

   b. One-way Non-Parametric ANOVA (Kruskal-Wallis Test), followed by multiple comparisons: This method requires at least nine independent samples from each Monitoring Point and Background Monitoring Point, therefore, the discharger shall anticipate the need for taking more than four samples per Monitoring Point, based upon past monitoring results. This method shall be used when the pooled background data for the parameter or constituent, obtained within a given sampling period, has not more than 50% of the data below the PQL. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis(i.e., that there is no release) to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated for that parameter or constituent; or

c. Method of Proportions: This method shall be used if the "combined data set", the data from a given Monitoring Point in combination with the data below the MDL for the constituent or parameter in question. This method (1) requires at least nine downgradient data points per Monitoring Point per Reporting Period, (2) requires at least thirty data points in the combined data set, and (3) requires that $N * P > 5$ (where N is the number of data points in the combined data set and P is the proportion of the combined set that exceed the MDL); therefore, the discharger shall anticipate the number of samples required, based upon past monitoring results. The test shall be carried out at the 99% confidence level. If the analysis results in rejection of the Null Hypothesis (i.e., that there is no release), the discharger shall conclude that a release is tentatively indicated for that constituent or parameter; or

d. Other Statistical Methods: These include methods pursuant to Title 27, Section 20415(e)(8)(c-e).

2. Non-Statistical Method: The discharger shall use the following non-statistical method for the VOC_{water} and VOC_{spg} Composite Monitoring Parameters and for all Constituents of Concern which are not amenable to the statistical tests under Part III.A.1.; each of these groupings of constituents utilizes a separate variant of the test, as listed below. Regardless of the variant used, the method involves a two-step process: (1) from all constituents to which the variant applies, compile a list of those constituents which exceed their respective background samples; and (2) (where several independent samples have been analyzed for that constituent at a given Monitoring Point) from the sample which contains the largest number of constituents. Background shall be represented by the data from all samples taken from the appropriate Background Monitoring Points during that Reporting Period (at least one sample from each Background Monitoring Point). The method shall be implemented as follows:

a. For the Volatile Organics Composite Monitoring Parameter for Water Samples (VOC_{water}): For any given Monitoring Point, the VOC_{water} Monitoring Parameter is a composite parameter addressing all VOCs listed in Appendix I to 40 CFR 258, and all unidentified peaks. Compile a list of each VOC which (1) exceeds its MDL in the Monitoring Point sample (an unidentified peak is compared to its presumed (MDL), and also (2) exceeds its MDL in less than ten percent of the samples taken during that Reporting Period from that medium's Background Points. The discharger shall conclude that a release is tentatively indicated for VOC_{water} Composite Monitoring Parameter if the list either (1) contains two or more constituents, or (2) contains one constituent that exceeds its PQL;

b. For the Volatile Organics Composite Monitoring Parameter for Soil-Pore Gas Samples (VOC_{spg}): The VOC_{spg} Monitoring Parameter is a composite parameter for soil-pore gas addressing at least all 47 VOCs listed in Appendix I to 40 CFR 258, based upon either GC or GC/MS analysis of at least ten liter samples of soil-pore gas (e.g., collected in a vacuum canister). It involves the same scope of VOCs as does the VOC_{spg} Monitoring Parameter. Compile a list of each VOC which (1) exceeds its MDL in the Monitoring Point sample (as unidentified peak is compared to its presumed MDL), and also (2) exceeds its MDL in less than ten percent of the samples taken during that Reporting Period from the (soil-pore-gas) Background Monitoring Points. The discharger shall conclude that a release is tentatively indicated for the VOC_{spg} Composite Monitoring Parameter if the list either (1) contains two or more constituents, or (2) contains one constituent that exceeds its PQL; or

c. For Constituents of Concern: Compile a list of constituents that exceed their respective MDL at the Monitoring Point yet do so in less than ten percent of the background samples taken during that Reporting Period. The discharger shall conclude that a release is tentatively indicated if the list either (1) contains two or more constituents, or (2) contains one constituent which exceeds its PQL.

3. Discrete Retest (Title 27, Section 25415(e)(8)(E)): In the event that the discharger concludes that a release has been tentatively indicated (under Parts III.A.1. or III.A.2.), the discharger shall, within 30 days of this indication, collect two new suites of samples for the indicated Constituent(s) of Concern or Monitoring Parameter(s) at each indicating Monitoring Point, collecting at least as many samples per suite as were used for the initial test. Resampling of the Background Monitoring Points is optional. As soon as the data is available, the discharger shall rerun the statistical method (or non-statistical comparison) separately upon each suite of retest data. For any indicated Monitoring Parameter or Constituent of Concern at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the discharger shall conclude that a release has been discovered. All retests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Constituents of Concern or Monitoring Parameter which triggered the indication there, as follows:

   a. If an ANOVA method was used, the retest shall involve only a repeat of the multiple comparison procedure, carried out separately on each of the two new suites of samples taken from the indicating Monitoring Point;

   b. If the Method of Proportions statistical test was used, the retest shall consist of a full repeat of the statistical test for the indicated constituent or parameter, using the new sample suites from the indicating Monitoring Point;

   c. If the non-statistical method was used:

      1. Because the VOC Composite Monitoring parameters (VOC_{water} or VOC_{spg}) each address, as a single parameter, an entire family of constituents which are likely to be present in any landfill release, the scope of the laboratory analysis for each retest sample shall include all VOCs detectable in that retest sample. Therefore, a confirming retest for either parameter shall have validated the original indication even if the suite of constituents in the confirming retest sample(s) differs from that in the sample which initiated the retest;

      2. Because all Constituents of Concern that are jointly addressed in the non-statistical testing under Part III.A.2.c. remain as individual Constituents of Concern, the scope of the laboratory analysis for the non-statistical retest samples shall be narrowed to involve only those constituents detected in the sample which initiated the retest.

B. RESPONSES TO VOC DETECTION IN BACKGROUND

1. Except as indicated in Part III.B.2., any time the laboratory analysis of a sample from a Background Monitoring Point, sampled for VOCs under Part III.A., shows either (1) two or more VOCs above their respective MDL, or (2) one VOC above its respective PQL, then the discharger shall immediately notify the Regional Board by phone that possible background contamination has occurred, shall follow up with written notification by

certified mail within seven days, and shall obtain two new independent VOC samples from that Background Monitoring Point and send them for laboratory analysis of all detectable VOCs within thirty days. If either or both the new samples validates the presence of VOC(s) at that Background Monitoring Point, using the above procedure, the discharger shall:

a. Immediately notify the Regional Board regarding the VOC(s) verified to be present at that Background Monitoring Point, and follow up with written notification submitted by certified mail within seven days of validation; and

b. Within 180 day of validation, submit a report, acceptable to the Regional Board's Executive Officer, which examines the possibility that the detected VOC(s) originated from the Unit and proposing appropriate changes to the Monitoring Program.

2. If the Regional Board's Executive Officer determines, after reviewing the report submitted under Part III.B.1.b., that the detected VOC(s) most likely originated for the Unit, the discharger shall assume that a release has been detected and shall immediately begin carrying out the requirements of Part I.E.2.d.

SUMMARY OF SELF-MONITORING AND REPORTING PROGRAMS

A. GROUND WATER MONITORING

1. The ground water monitoring wells shall be sampled quarterly according to the following schedule:

First Quarter:	January 1 through March 31
Second Quarter:	April 1 through June 30
Third Quarter:	July 1 through September 30
Fourth Quarter:	October 1 through December 31

The samples shall be analyzed for the following:

Monitoring Parameters	Unit	Type of Sample	Sampling Frequency	Reporting Frequency
1. pH	Number	Grab	Quarterly	Semi-Annual
2. Total Dissolved Solids	mg/L	Grab	Quarterly	Semi-Annual
3. Specific Conductance	Micromhos/cm	Grab	Quarterly	Semi-Annual
4. Temperature	°F	Grab	Quarterly	Semi-Annual
5. Carbonate	mg/L	Grab	Quarterly	Semi-Annual
6. Chloride	mg/L	Grab	Quarterly	Semi-Annual
7. Magnesium	mg/L	Grab	Quarterly	Semi-Annual
8. Calcium	mg/L	Grab	Quarterly	Semi-Annual
9. Sulfate	mg/L	Grab	Quarterly	Semi-Annual
10. Nitrate (as N)	mg/L	Grab	Quarterly	Semi-Annual
11. Ground water elevation Elevation (USGS Datum)	0.00 ft	Measurement	Quarterly	Semi-Annual
12. Semi-volatiles	mg/L	Grab	Quarterly	Semi-Annual
13. Volatile Organic compounds (EPA Methods 8260)	µg/L	Grab	Quarterly	Semi-Annual

14. Dissolved Oxygen	mg/L	Grab	Quarterly	Semi-Annual
15. Iron	mg/L	Grab	Quarterly	Semi-Annual
16. Potassium	mg/L	Garb	Quarterly	Semi-Annual

II. Every five years the discharger shall sample for Constituents of Concern in accordance with Part II.A.3., beginning with the year of adoption of this Board Order, with successive direct monitoring efforts being carried out alternately during January 1 through June 30 of one 5-year sampling event and July 1 through December 31 of the next 5-year sampling event, and every fifth year, thereafter. The COC Report shall be submitted by February 15 of the sixth year. The samples shall be analyzed for the following constituents listed in Appendix II to 40 CFR Part 258:

Constituents of Concern

1. Total Dissolved Solids
2. Bicarbonate (HCO3)
3. Carbonate (CaC03)
4. Total Alkalinity
5. Hydroxide
6. Fluoride
7. Dissolved Oxygen
8. Phosphate
9. Total Phosphorus
10. Chemical Oxygen Demand
11. Total Hardness
12. Boron
13. Calcium
14. Magnesium
15. Potassium
16. Sodium
17. Iron
18. Manganese
19. Zinc
20. Antimony, Total
21. Arsenic, Total
22. Barium, Total
23. Beryllium, Total
24. Cadmium, Total
25. Chromium, Total
26. Cobalt, Total
27. Lead, Total
28. Mercury, Total
29. Nickel
30. Selenium, Total
31. Silver, Total
32. Thallium, Total
33. Tin, Total
34. Vandium, Total
35. Zinc, Total
36. Chromium, hexavalent
37. DBCP and EDB
38. App II Pesticides
39. App II Herbicides

40. Volatiles (8260)
41. App II Semivolatiles
42. Total Organic Halogens
43. Sulfide
44. pH
45. Specific Conductance
46. Chloride
47. Nitrate (as N)
48. Total Organic Carbon
49. Phenols (8040)
50. Cyanide
51. Total Cations
52. Total Anions

The collection, preservation and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

B. GAS MONITORING

1. Sample Quarterly: The discharger shall monitor the 31 vertical gas wells quarterly and report semi-annually for:

Parameters
Methane
Carbon Dioxide
Oxygen
Nitrogen
TOC (as methane)

2. Sample Annually: The discharger shall monitor for the following constituents annually and report annually on February 15 for the following:

1,2 Dibromoethane (Ethylene Dibromide)
Benzyl Chloride
Chlorobenzene
Dichlorobenzene
1,1 Dichloroethane
1,2 Dichloroethane
1,1 Dichloroethene
Dichloromethane
Hydrogen Sulfide
Tetrachloroethylene
Toluene
1,1,1 Trichloroethane
Trichloroethylene
Trichloromethane
Vinyl ChlorideXylene

REPORTING

1. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.

2. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurement(s);
   b. The individual(s) who performed the sampling or measurement(s);
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or method used; and
   f. The results of such analyses.

3. Each report shall contain the following statement:

   "I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

4. A duly authorized representative of the discharger may sign the documents if:

   a. The authorization is made in writing by the person described above;

   b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and

   c. The written authorization is submitted to the Regional Board's Executive Officer.

5. Report immediately any failure in the waste disposal system to the Regional Board's Executive Officer and the Director of the Riverside County Environmental Health Department by telephone and with a follow-up letter.

6. Monitoring reports shall be certified under penalty of perjury to be true and correct and shall contain the required information at the frequency designated in this monitoring report.

7. Quarterly sampling reports shall be submitted to the Regional Board semi-annually, in accordance with the following schedule:

   First Semi-Annual (January 1 through June 30) – report due by July 31
   Second Semi-Annual (July 1 through December 31) – report due by February 15

8. Annual monitoring reports shall be submitted to the Regional Board by February 15 of the following year.

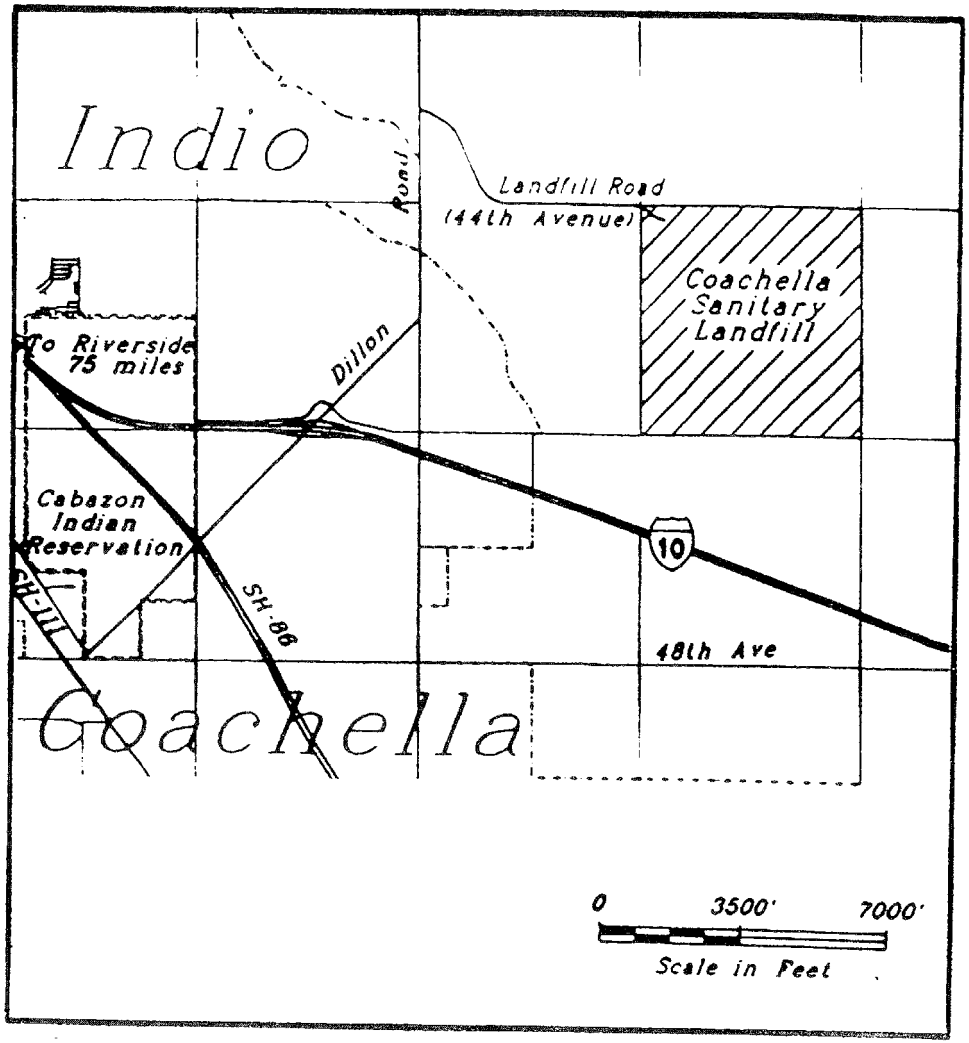
9. Five-year Monitoring Reports shall be submitted to the Regional Board by February 15 following the adoption of this Board Order and every sixth year thereafter.

10. Submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

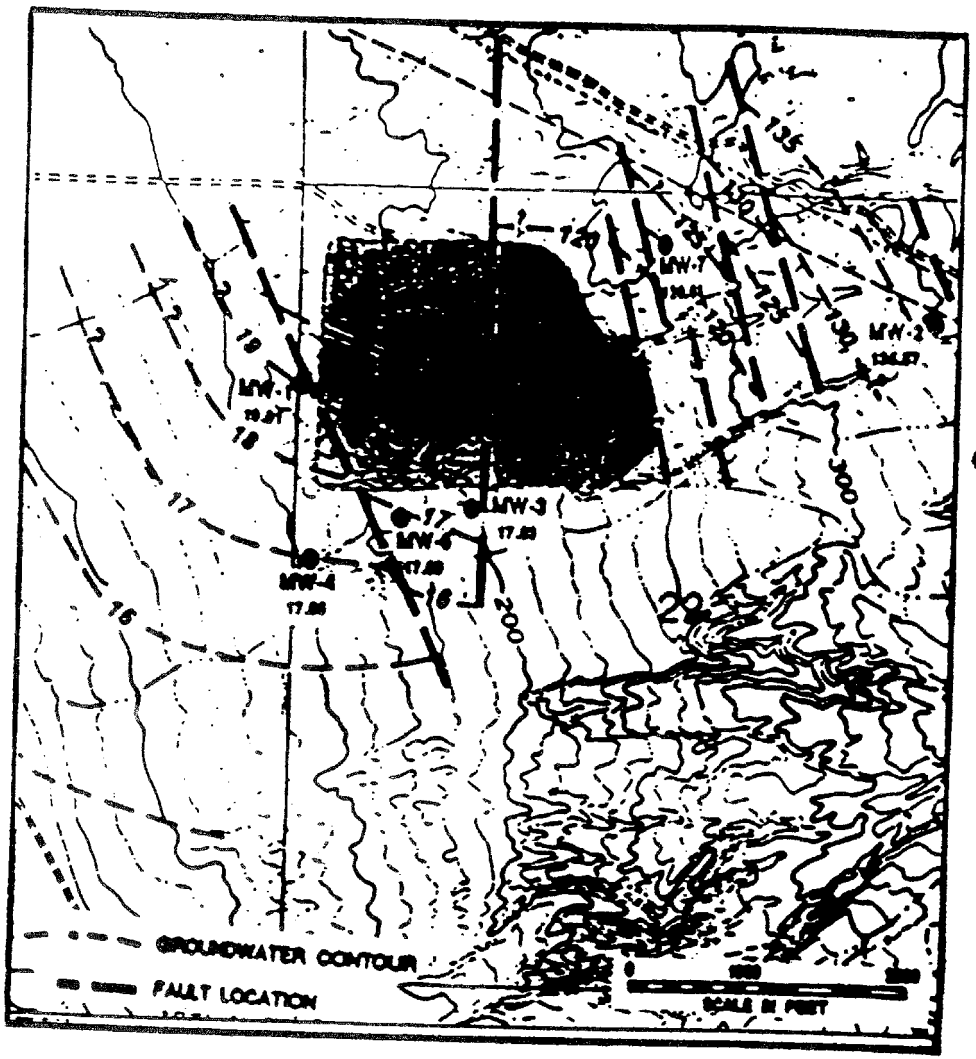
Ordered by: _____
Executive Officer

June 27, 2001
Date



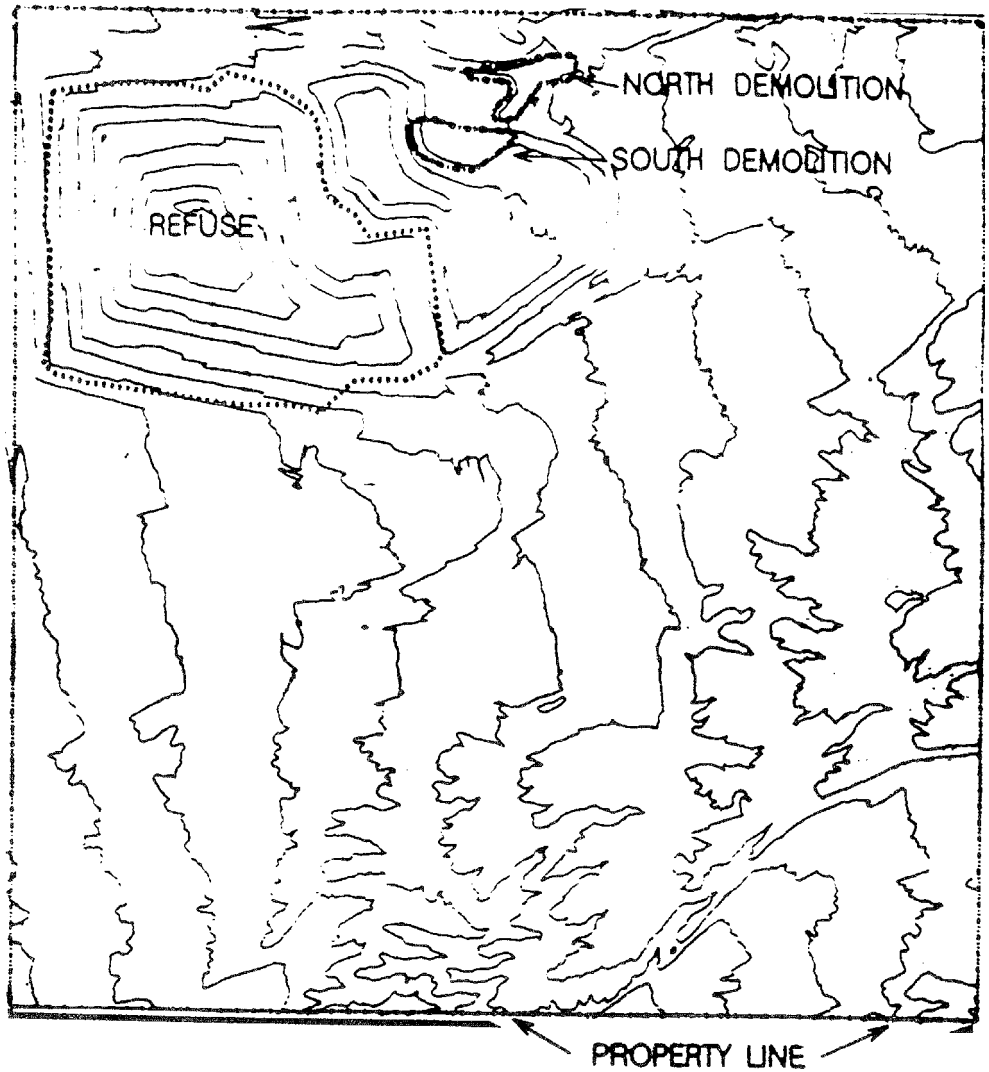
ATTACHMENT A
SITE MAP
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County
Sections 22, T5S, R8E, SBB&M

Board Order No. 01-



ATTACHMENT B
Fault Map
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County
Sections 22, T5S, R8E, SBB&M

Board Order No. 01-098



ATTACHMENT C
Fill Area
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County
Sections 22, T5S, R8E, SBB&M

DEED NOTIFICATION - SANITARY LANDFILL CLOSURE

Detailed Description of Site

Notice is hereby given that a portion of this property was once operated by the Riverside County Waste Management Department as a municipal sanitary landfill. Approximately 67 of the total 640 acres of land were used to dispose of refuse from 1972 to 1997, primarily in the northwest corner of the property. Wastes accepted for burial at the site consisted of non-hazardous residential, agricultural, construction, industrial, mixed municipal and dead animals.

The entire property is more accurately described as Section 22, T5S, R8E, SBB&M, with the "landfill footprint" (area of refuse disposition) portion described as follows:

Refuse Fill Area

Commencing at the Northwest Corner of Section 22,T. 5 S., R. 8 E., San Bernardino Base and Meridian as shown on Record of Survey Book 98 page 9, Records of Riverside County California.
Thence Southerly along the Westerly line of said Section 22, a distance of 438.32 feet;
Thence North 89°57'21" East 194.25 feet said point also being the True Point of Beginning;

Thence North 80°31'56" East 224.14 feet,
Thence North 85°07'40" East 253.61 feet,
Thence South 87°07'31" East 257.61 feet,
Thence South 76°34'25" East 129.89 feet,
Thence North 49°19'34" East 145.39 feet,
Thence South 75°07'58" East 268.57 feet,
Thence South 56°37'26" East 203.57 feet,
Thence South 35°57'12" East 66.51 feet,
Thence South 17°29'25" East 99.35 feet,
Thence South 03°16'11" East 241.60 feet,
Thence South 20°37'59" East 78.24 feet,
Thence South 61°32'38" East 167.22 feet,
Thence South 30°54'49" East 143.09 feet,
Thence North 82°12'27" East 317.65 feet,
Thence South 07°49'23" East 641.29 feet,
Thence South 16°56'57" West 78.79 feet,
Thence South 63°26'01" West 192.63 feet,
Thence South 90°00'00" West 264.18 feet,
Thence South 48°53'02" West 265.27 feet,
Thence North 74°10'46" West 102.67 feet,
Thence North 83°42'08" West 117.87 feet,
Thence North 89°33'11" West 275.67 feet,
Thence North 82°24'53" West 815.76 feet,
Thence North 75°19'15" West 161.48 feet,
Thence North 49°07'38" West 76.99 feet,
Thence North 09°28'44" East 251.09 feet,
Thence North 00°44'57" West 351.07 feet,

Thence North 14°15'02" West 139.99 feet
Thence North 03°35'25" East 688.10 feet to the POINT OF BEGINNING. Containing 67.10 acres, more or less

Additionally, two smaller known areas of demolition fill exist on site and are described as follows.

Northern Demolition Fill Area

Commencing at the Northwest Corner of Section 22,T. 5 S., R. 8 E., San Bernardino Base and Meridian as shown on Record of Survey Book 98 page 9, Records of Riverside County California
Thence Easterly along the Northerly line of said Section 22, a distance of 2646.11 feet,
Thence South 00°07'11" West 282.63 feet said point also being the True Point of Beginning;

Thence North 88°13'26" West 86.79 feet,
Thence South 67°41'47" West 64.82 feet,
Thence North 87°44'25" West 71.27 feet,
Thence South 26°42'45" East 41.69 feet,
Thence South 76°26'43" East 53.97 feet,
Thence South 87°10'31" East 156.85 feet,
Thence South 66°12'16" East 27.86 feet,
Thence South 15°51'46" East 21.91 feet,
Thence South 14°00'28" West 34.04 feet,
Thence South 47°24'11" West 105.90 feet,
Thence South 12°41'47" West 51.14 feet,
Thence South 45°16'39" East 18.99 feet,
Thence South 88°01'09" East 60.76 feet,
Thence North 73°30'51" East 59.41 feet,
Thence North 38°35'13" East 228.35 feet,
Thence North 84°38'35" East 52.70 feet,
Thence North 79°19'01" East 125.10 feet,
Thence North 15°16'49" East 88.15 feet,
Thence North 20°15'48" West 38.95 feet,
Thence South 85°44'26" West 113.50 feet,
Thence North 73°07'25" West 26.63 feet,
Thence South 76°07'25" West 271.99 feet to the POINT OF BEGINNING; Containing 2.06 acres, more or less.

Southern Demolition Fill Area

Commencing at the Northwest Corner of Section 22,T. 5 S., R. 8 E., San Bernardino Base and Meridian as shown on Record of Survey Book 98 page 9, Records of Riverside County California.
Thence Easterly along the Northerly line of said Section 22, a distance of 2646.11 feet;
Thence South 00°07'10" West 618.38 feet said point also being the True Point of Beginning;

Thence North 86°42'35" West 233.66 feet,
Thence North 72°38'48" West 145.24 feet,
Thence South 87°17'35" West 110.10 feet,
Thence South 41°39'31" West 20.87 feet,
Thence South 04°00'48" East 66.01 feet,
Thence South 22°28'45" East 108.77 feet,

Thence South 67°14'50" East 152.35 feet,
Thence South 82°48'20" East 145.32 feet,
Thence North 56°17'00" East 131.11 feet
Thence North 51°47'50" East 161.13 feet,
Thence North 16°23'36" East 26.18 feet,
Thence North 82°43'12" West 78.84 feet to the POINT OF BEGINNING; Containing 2.22 acres, more or less.

A map of the foregoing legal descriptions is attached as Exhibit A

Date of Official Closure in Accordance with Local, State and Federal Regulations

This property was officially closed in accordance with all Local, State and Federal regulations in force on the date recorded hereof. The notice of completion for a $4.7 million dollar construction contract to affect said closure was recorded on November 10, 1999.

Boundaries, Height, and Depth of Filled Area(s)

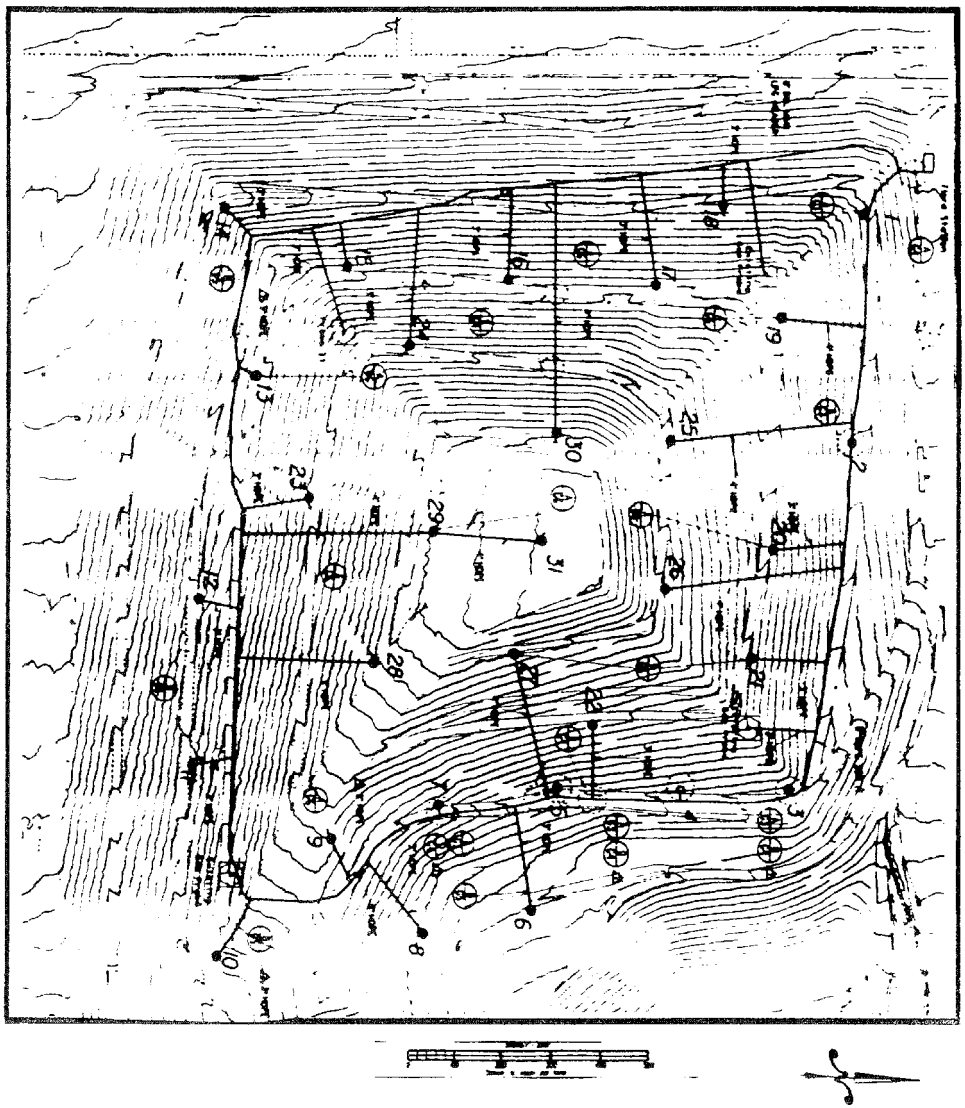
The boundaries of the refuse and demolition fill areas are as noted in the detailed description of the site, above. The maximum final thickness of the refuse fill area is approximately 259 feet (assuming bottom of refuse at 120 MSL and a known final top deck elevation of 379 MSL). The fill thickness of the two demolition areas is estimated to be an average of 15 feet deep.

Closure and Postclosure Plans

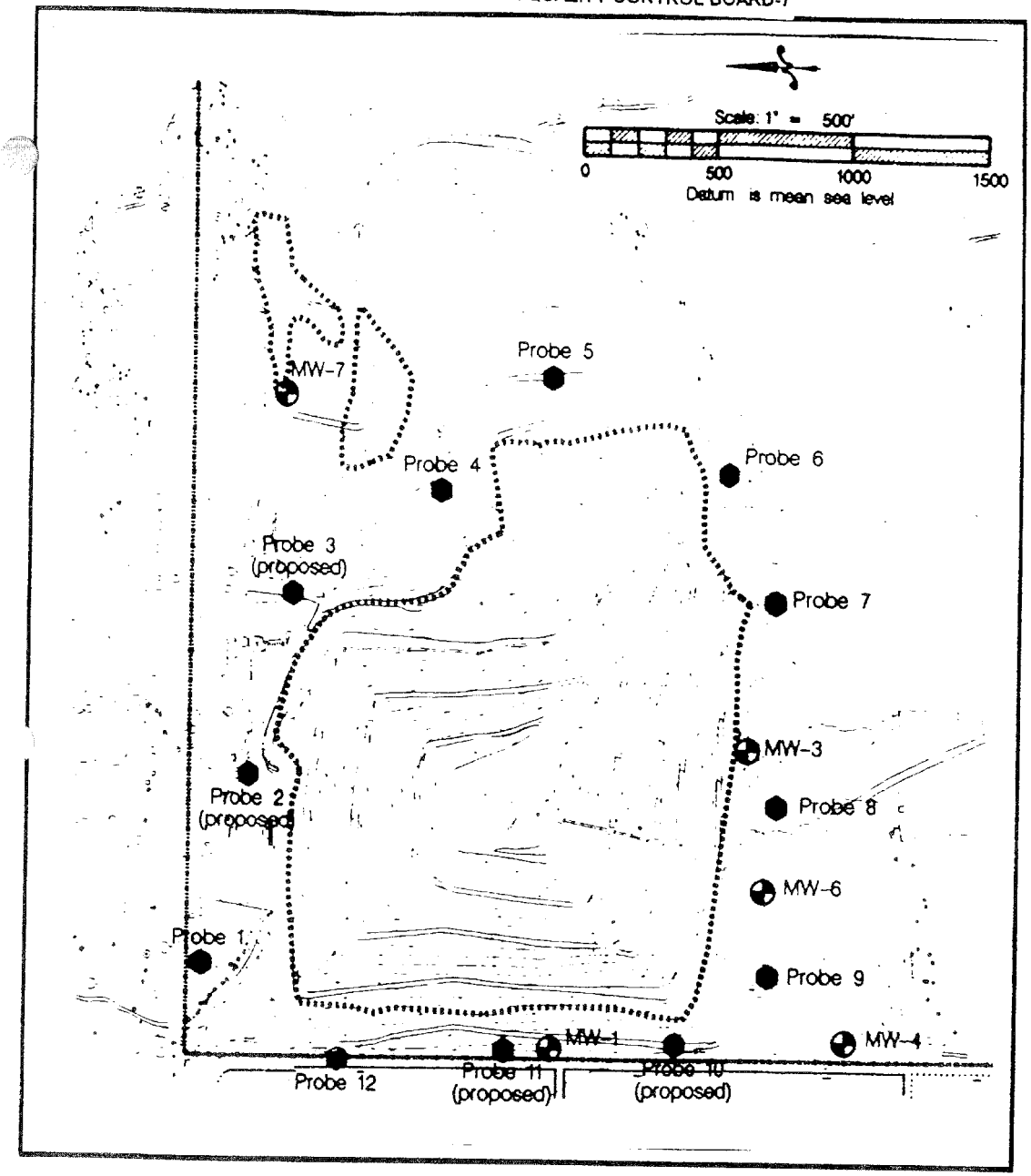
Closure and Postclosure plans are available for review at the Riverside County Waste Management Department's main office located at: 1995 Market Street, Riverside, CA 92501.

Restricted Use Statement & New Owner's Responsibility

The future use of this site is restricted in accordance with the Postclosure maintenance plan, on file at the above location. In the event that the discharger defaults on carrying out either the Postclosure maintenance plan or any corrective action needed to address a release, and then the responsibility for carrying out such work falls to the property owner.



ATTACHMENT E
Landfill Gas Well and Flare Station Locations
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County
Sections 22, T5S, R8E, SBB&M
Board Order No. 01-098



ATTACHMENT F
New Gas Probe and Proposed Gas Probe Location Map
CLOSURE/POSTCLOSURE MAINTENANCE
FOR
RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, OWNER/OPERATOR
COACHELLA SANITARY LANDFILL
CLASS III LANDFILL
North of Coachella - Riverside County
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Board Order No. 01-098